

United States Department of the Interior Fish and Wildlife Service



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March 25, 2009

Mr. David Phillips Indiana DNR, Division of Reclamation R.R. #2, Box 129 Jasonville, Indiana 47438-9517

Company Name: Solar Sources, Inc.

Permit No: S-364

Pit Name: Alfordsville Mine

County: Daviess

Dear Mr. Phillips:

This responds to your letter of February 17, 2009 requesting U.S. Fish and Wildlife Service (FWS) comments on a permit application for the aforementioned mining operation.

These comments are consistent with the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.), the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, the U. S. Fish and Wildlife Service's Mitigation Policy, and the Indiana Coal Mining Regulatory Program, Section 310 IAC 12-3-107.

According to your letter the proposed permit area covers 884 acres consisting primarily of crop land (534 acres) and forest (327 acres). The proposed post-mining plan would decrease forest land by 65.4 acres but would add 55.8 acres of fish and wildlife land.

We were not able to inspect the permit area. Based on a review of maps and aerial photographs the pre-mining forest is almost entirely associated with forested tributaries of East Fork Sugar Creek. The maximum fall between the heads of drainageways and the lowest elevation in the main drainageway in the permit area is approximately 60-70 feet. The National Wetland Inventory maps do not indicate any wetlands in the permit area other than small artificial impoundments. All impoundments are bordered by forest habitat on one or more sides. This forest/stream network provides habitat for migratory songbirds as well as other forest wildlife. It also provides nutrient inputs and structure, and contributes of the hydrologic stability of the stream system. We recommend the following measures to restore and enhance wildlife habitat.

- 1. Restore the entire length of pre-mining intermittent streams, with forested corridors at least as wide as the pre-mining condition.
- 2. Restore all pre-mining forest habitat acreage. Post-mining wildlife land could meet this recommendation if it contains a major component of native hardwoods.
- 3. All post-mining forest and impoundments should be connected to the restored stream system.

Endangered Species

The aforementioned permit is within the range of the Federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There is suitable summer habitat for this species along the aforementioned forested drainageways and similar habitat in the area surrounding the project site. There are no current records of Indiana bats near the site but to our knowledge the area has not been surveyed. The proposed mining activity would eliminate over 300 acres of summer habitat for this species. To minimize impacts on Indiana bat habitat we recommend preserving as much as possible of the downstream portion of the central drainageway, which connects with additional habitat downstream. We also recommend the following standard conservation measures to minimize take in accordance with our national biological opinion issued to the Office of Surface Mining.

- 1. To prevent incidental take from removal of an occupied roost tree, tree-clearing must be avoided along waterways and adjacent forested areas during the summer reproductive season (April 1 September 30).
- 2. Eliminate or avoid tree clearing for non-extraction activities (e.g. sediment ponds, access and haul roads, soil stockpiles and refuse disposal).
- 3. If parts of the forested summer habitat will not be mined for at least 2 years after the permit application is approved, preserve the trees in those areas until the last Indiana bat non-occupancy period (October 1 March 31) prior to mining.
- 4. Drainageways are an essential component of Indiana bat summer habitat. Forested drainageways should be restored in total length comparable to the pre-mining condition.
- 5. Post-mining forest restoration should be no less diverse that the pre-mining forest and should include species suitable for Indiana bat nursery roosts.

If these measures are implemented we concur that the proposed project will minimize take in accordance with our 1996 national biological opinion issued to the Office of Surface Mining for protection of federally endangered species, pursuant to Section 7 of the Endangered Species Act. Should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

This precludes the need for further consultation on this project as required under the National Biological Opinion pursuant to Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

If permit conditions should change in any manner that might affect fish and wildlife, please recoordinate with our office promptly. For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

Scott E. Pruitt Supervisor

cc: Ramona Briggeman, IDNR Division of Reclamation, Jasonville, IN Roger Hedge, IDNR Division of Nature Preserves, Indianapolis, IN

ES: MLitwin/334-4261/February 16, 2018